

### **REMARKS/ARGUMENTS**

In the Office Action mailed April 17, 2009 (hereinafter, the “Office Action”), claim 9 was objected to under 35 U.S.C. § 132(a). Claim 9 was also rejected under 35 U.S.C. § 112, first paragraph. Claims 1-4, 6, 8-20 and 22 were rejected under 35 U.S.C. § 103(a). These rejections are respectfully traversed.

In response to these rejections, claims 1, 8-9, and 22 have been amended.

#### **I. Specification**

Claim 9 was objected as adding new subject matter not disclosed in the original specification as filed. Without acknowledging that claim 9 as previously presented does include limitations not originally disclosed in the specification, claim 9 has now been amended to recite that the player’s response to stimulation signal is able to be recorded using a sensor and is processed so as to allow stress characteristics of the player to be determined. As confirmed by the Examiner in raising the original objections, Applicant respectfully submits that this limitation is fully disclosed in the specification as originally filed, for example, at page 7, lines 1-10 of the specification. (Office Action, page 2.)

Reconsideration and withdrawal of the objections against claim 9 is respectfully requested in view of the amendments and the foregoing arguments.

#### **II. Section 112 Rejection**

Claim 9 was rejected as failing to comply with the written description requirement of 35 U.S.C. § 112, first paragraph. As indicated above, claim 9 has been amended to recite that the player’s response to stimulation signal is able to be recorded using a sensor and is processed so as to allow stress characteristics of the player to be determined. Support for this amendment is provided, for example, at page 7, lines 1-10 of the specification. (Office Action, page 2.)

### **III. Section 103(a) Rejection of Claims 1-4, 6, 8-10, 13, and 14**

The Examiner rejected claims 1-4, 6, 8-10, 13 and 14 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,318,295 to Hofer (hereinafter, “Hofer”) in view of U.S. Pat. No. 5,565,840 to Thorner et al. (hereinafter, “Thorner”). This rejection is respectfully traversed.

The factual inquiries that are relevant in the determination of obviousness are determining the scope and contents of the prior art, ascertaining the differences between the prior art and the claims in issue, resolving the level of ordinary skill in the art, and evaluating evidence of secondary consideration. KSR Int’l Co. v. Teleflex Inc., 550 U.S. 398, 2007 U.S. LEXIS 4745, at \*\*4-5 (2007) (citing Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966)). As the Board of Patent Appeals and Interferences has recently confirmed, “obviousness requires a suggestion of all limitations in a claim.” In re Wada and Murphy, Appeal 2007-3733 (citing CFMT, Inc. v. Yieldup Intern. Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003)). Moreover, the analysis in support of an obviousness rejection “should be made explicit.” KSR, 2007 U.S. LEXIS 4745, at \*\*37. “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” Id. (citing In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Claim 1 has been amended to recite:

wherein the electrical pulses are controlled to vary the stimulation signals delivered by the at least one wearable electrode unit to simulate a hit or a virtual impact during the activity involving the player

Applicant respectfully submits that at least this subject matter is not taught or suggest by the cited references.

Hofer involves a system in which:

A computer unit is arranged to receive the physical values of a user measured by means for non-invasive measuring [such an oxygen breathing mask] and also to receive the normal score of the skill-testing, entertainment or game equipment and certain multiplication factors for certain physical values. The normal score is evaluated in dependence on one or more physical values of the user, and consequently the evaluated score produced by multiplication of the normal score

of the equipment with the multiplication factors resulting from the physical values is displayed on means for displaying scores.

(Hofer, col. 3, lines 19-30.) Hofer further states:

The controlling means are programmed to turn any functional or only decorative part of the skill-testing, entertainment or game equipment on or off, or to change the intensity of current supplied to the equipment, or to provide an enabling pulse to stimulus generating means or certain game units in common use in game machines, in dependence on certain evaluated scores received by the controlling means from said computer unit. The controlling means are programmed so as to effect said switchings or changes of current intensity or transmissions of pulses to the stimulus generating means or to certain known game units, effecting certain game activities, in the moment when certain evaluated scores are received from the computer unit.

(Hofer, col. 4, lines 25-36; emphasis added.)

In rejecting the version of claim 1 prior to the amendments made herein, the Examiner stated that column 3, lines 4 to 10 (the “First Excerpt”), and lines 50 to 65 (the “Second Excerpt”) of Hofer disclose the limitation that “the electrical pulses are controlled to vary the stimulation signals delivered by at the least one electrode unit to simulate different events occurring during the activity involving the player.” (Office Action, page 4.)

With reference the First Excerpt cited to by the Examiner, the Applicant refers to Hofer starting at column 2, line 56, which states:

transmit[ing] an enabling pulse to said stimulus generating means, or to a certain game unit in common use in game machines, such as for instance an add unit, subtract unit, game processing unit or other appropriate game units, so as to enable by this pulse -- if the pulse is transmitted to the add unit or a subtract unit - for instance .... or -- in case the pulse is transmitted to a processing unit or appropriate other known game units -- the actuation of certain unit game activities, such as for example for a certain game action, a certain sequence of game actions, or the appearance in the game of a certain game figure with certain abilities, or the like.

(Hofer, col. 2, line 62-col. 3, line 10; emphasis added.) The underlined portion of the above quotation of Hofer emphasizes one of the key differences between Hofer and the claimed invention.

Hofer describes a system in which signals from the player are used to control the game, which is diametrically opposed to the present invention, which seeks to use signals provided to the player to simulate actions in the actual game. In particular, the subject matter of amended claim 1 recites that “electrical pulses are controlled to vary the stimulation signals delivered by the at least one wearable electrode unit to simulate a hit or a virtual impact during the activity involving the player” (emphasis added) which is not taught or suggested by Hofer.

In addition, with respect to Hofer, “[t]he controlling means are programmed to turn any functional or only decorative part of the skill-testing, entertainment or game equipment on or off, or to change the intensity of current supplied to the [entertainment or game] equipment . . . , in dependence on certain evaluated scores received by the controlling means from said computer unit.”

(Hofer, col. 4, lines 25-36; emphasis added.) Hofer in any event fails to teach or suggest “the stimulation signals delivered by the at least one wearable electrode unit to simulate a hit or a virtual impact,” as recited in claim 1. (Emphasis added.)

For at least the foregoing reasons, Applicant thus respectfully submits that amended claim 1 is patentable over the cited prior art.

In addition, Applicant submits that the cited references do not teach or suggest “at least one wearable electrode unit being adapted to attach to an arm or leg of the player,” as recited in claim 1. The Examiner has admitted that Hofer fails to explicitly teach the limitation of the electrode units being wearable. (Office Action, page 4.) However, the Examiner seeks to cure that deficiency by referring to Thorner, which discloses a vest or harness incorporating tactile actuators.

Even if it were proper to combine the disclosures of Hofer and Thorner, which Applicant does not admit, that combination still fails to disclose “at least one wearable electrode unit being adapted to attach to an arm or leg of the player.” Thorner discloses a tactile actuation vest, or harness, and thus there is no disclosure of “at least one wearable electrode unit being adapted to attach to an arm or leg of the player.” Likewise, Hofer does not disclose this subject matter, as admitted in the Office Action. Thus, Applicant submits that the combination of the Thorner and Hofer certainly does not teach this subject matter. Indeed, Applicant respectfully submits that it

would most likely appear to a person skilled in the art to be quite dangerous to supply an electrical pulse to the torso of the player (such by the vest or harness of Thorner), since this could adversely affect, for example, the heart of the player.

With reference to our above detailed submissions, Applicant respectfully submits that the prior art combination relied upon by the Examiner, even if it were a valid combination, which again the Applicant does not admit, still clearly fails to provide a disclosure that would lead a person skilled in the art to, *inter alia*, “at least one wearable electrode unit being adapted to attach to an arm or leg of the player,” as defined in amended claim 1. As a result, Applicant respectfully submits that the rejection against claim 1 be withdrawn in view of the amendments and the above arguments.

In relation to the Examiner’s objections of claims 2, 3, and 4, Applicant respectfully submits that these claims are patentable, at least, for being dependent upon a patentable main claim.

In relation to the rejection of claim 8, Applicant respectfully submits that an upper body of a person is not a limb of the person. However, in an effort to expedite allowance of the present application, claim 8 has been amended to explicitly refer to the arm or leg of the player. Therefore, Applicant respectfully submits that amended claim 8 is additionally patentable over the prior art.

In relation to the rejection of claim 9, this claim has been amended to define that the response is “processed so as to determine a stress characteristic of the player.” Applicant believes that this subject matter is not found in either Hofer or Thorner, and therefore Applicant respectfully submits that amended claim 9 is additionally patentable.

In relation to the rejection of claims 10, 13 and 14, Applicant respectfully submits that those claims are patentable, at least, for being dependent on claim 1.

In view of the foregoing, Applicant respectfully submit reconsideration of the rejection of claims 1-4, 6, 8-10, 13, and 14 is respectfully requested.

#### **IV. Section 103(a) Rejection of Claims 15-20**

The Examiner rejected claims 15-20 under 35 U.S.C. § 103(a) as being unpatentable over Hofer in view of Thorner and U.S. Pat. No. 6,135,450 to Huang et al. (“Huang”). This rejection is respectfully traversed.

The standard for nonobviouness is set forth above.

Regarding the rejections of claims 15 to 20, Applicant respectfully submits that these claims are patentable, at least, for being dependent, directly or indirectly, upon patentable subject matter.

#### **V. Section 103(a) Rejection of Claims 11, 12, and 22**

The Examiner rejected claims 11, 12, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Hofer in view of Thorner and U.S. Pat. No. 5,974,342 to Petrofsky (“Petrofsky”). This rejection is respectfully traversed.

The standard for nonobviouness is set forth above.

In relation to the rejections against claims 11 and 12, Applicant respectfully submits that those claims are patentable, at least, for being dependent upon on a patentable main claim. Additionally, the Examiner seeks to combine the disclosure in Petrofsky, and the disclosures in Hofer and Thorner in support of his rejection. Applicant respectfully submits that Petrofsky, being a document describing therapeutical treatments using electrical current is clearly not related to the art of Hofer and Thorner. First and foremost, and with reference to our detailed arguments above in support of the patentability of amended claim 1, the prior art combination of Hofer and Thorner, if allowable, which is not admitted by the Applicant, does not disclose or make obvious the use of electrical pulses applied to the player to simulate a hit or a virtual impact on the player. Therefore, Applicant respectfully submits that a person skilled in the art having been presented with the prior art combination of Hofer and Thorner, would not turn to the Petrofsky prior art in an unrelated field. Furthermore, even if presented with a disclosure of using certain electrical signals for therapeutic treatment of a person, it would still not be obvious to arrive at the present invention of applying an electrical pulse to a player to simulate a hit or a

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virtual impact during a game. Therefore, Applicant respectfully submits that claims 11 and 12 are additionally patentable.

In relation to the rejection of claim 22, claim 22 has been amended to define, *inter alia*, that a response from the player is “processed so as to determine a stress characteristic of the player.” Applicant respectfully submits that at least the above feature of amended claim 22 is patentable over the prior art combination, emphasizing again that the Applicant does not admit that the Examiner has relied upon a valid prior art combination

## VI. Conclusion

Applicants respectfully assert that all pending claims are patentably distinct from the cited references, and request that a timely Notice of Allowance be issued in this case. If there are any remaining issues preventing allowance of the pending claims that may be clarified by telephone, the Examiner is requested to call the undersigned.

Respectfully submitted,



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